FIG. 1A

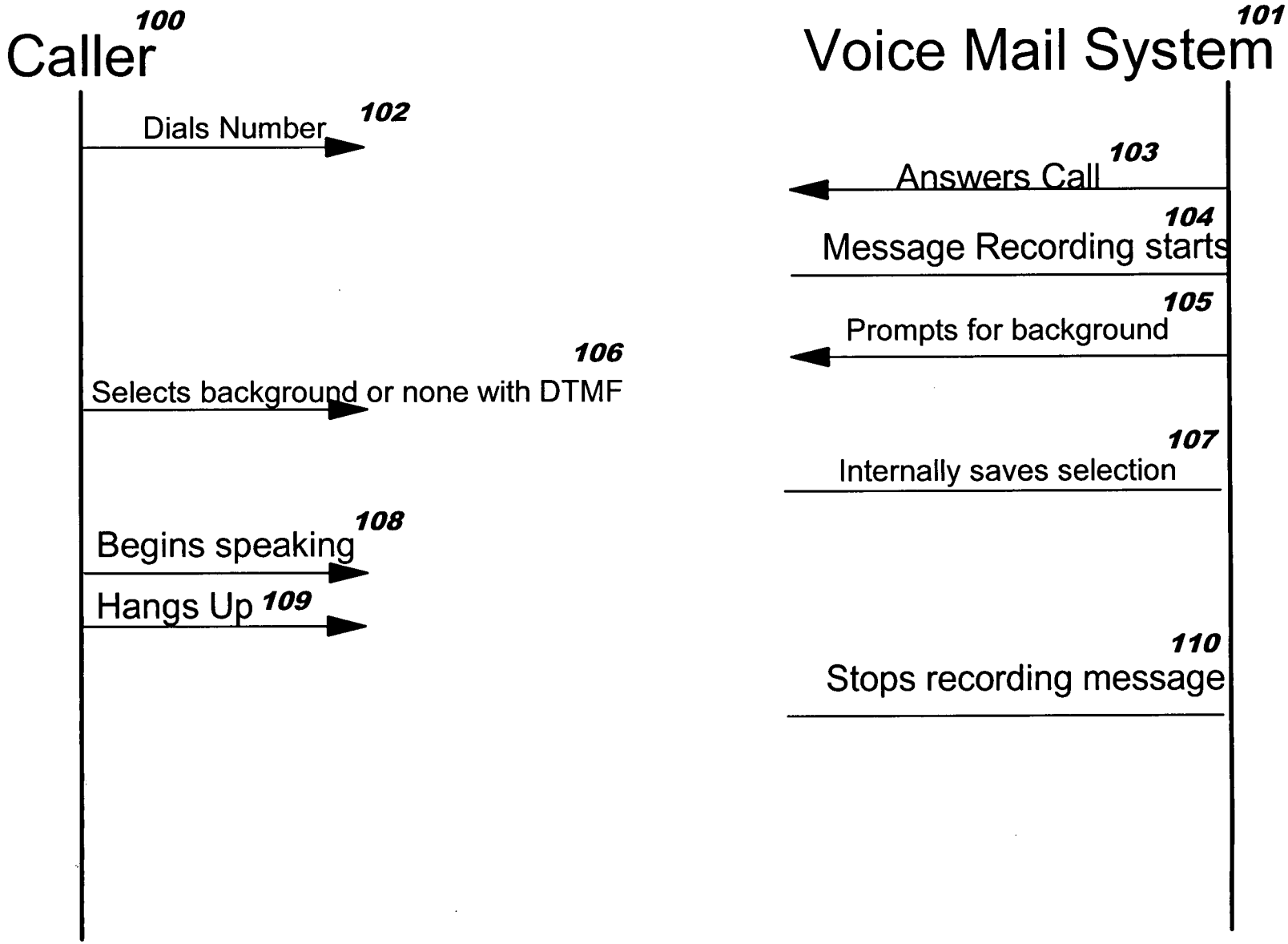
Caller
100
Voice Mail System
101
Dials Number
102
Answers Call
103
Message Recording starts
104
Prompts for background
105
Selects background or none with DTMF
106
Internally saves selection
107
Begins speaking
108
Hangs Up
109
Stops recording message
110

FIG. 1B

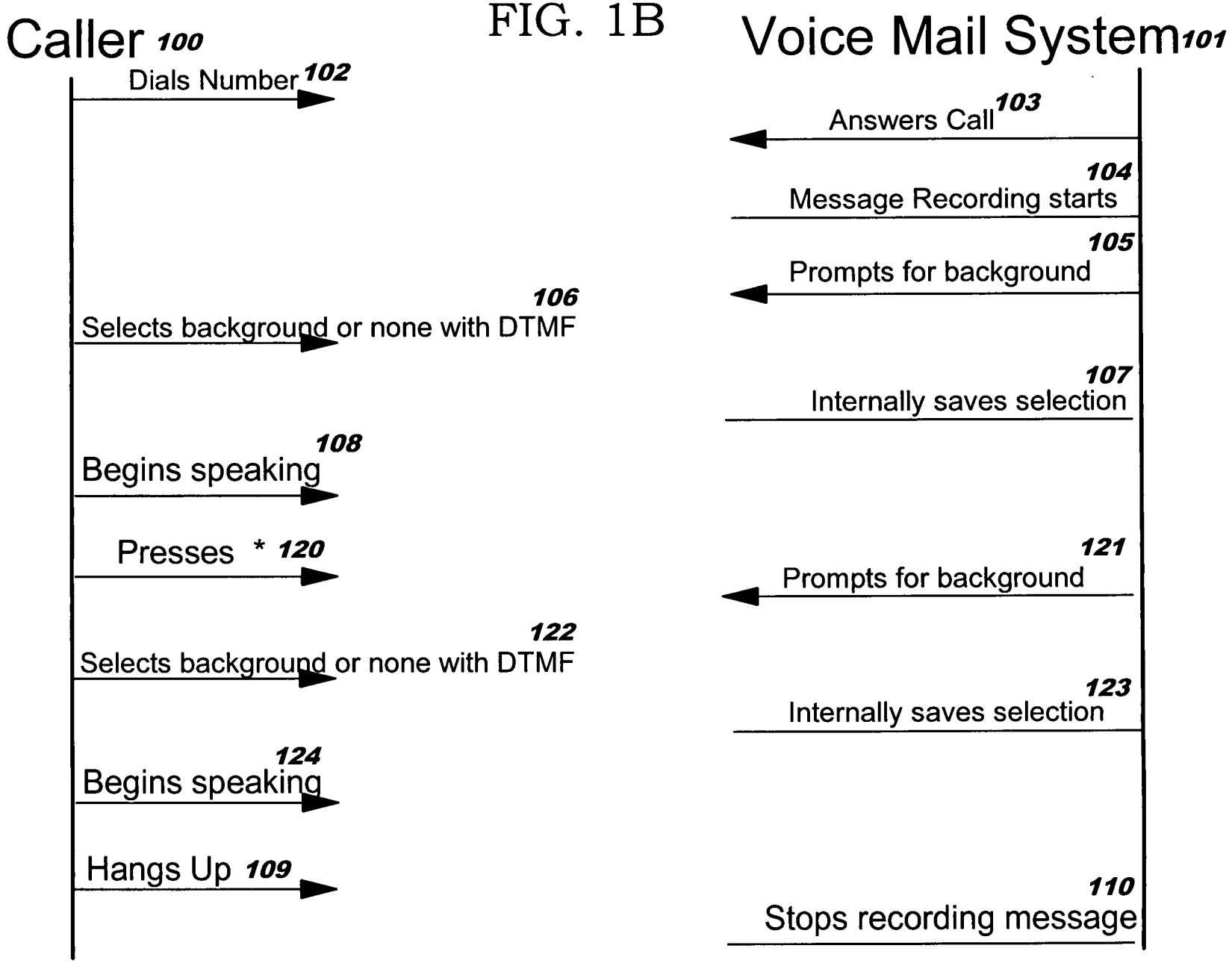
Caller 100
Voice Mail System 101
Dials Number 102
Answers Call 103
104
Message Recording starts
105
Prompts for background
106
Selects background or none with DTMF
107
Internally saves selection
108
Begins speaking
Presses * 120
121
Prompts for background
122
Selects background or none with DTMF
123
Internally saves selection
124
Begins speaking
Hangs Up 109
110
Stops recording message

FIG. 1C

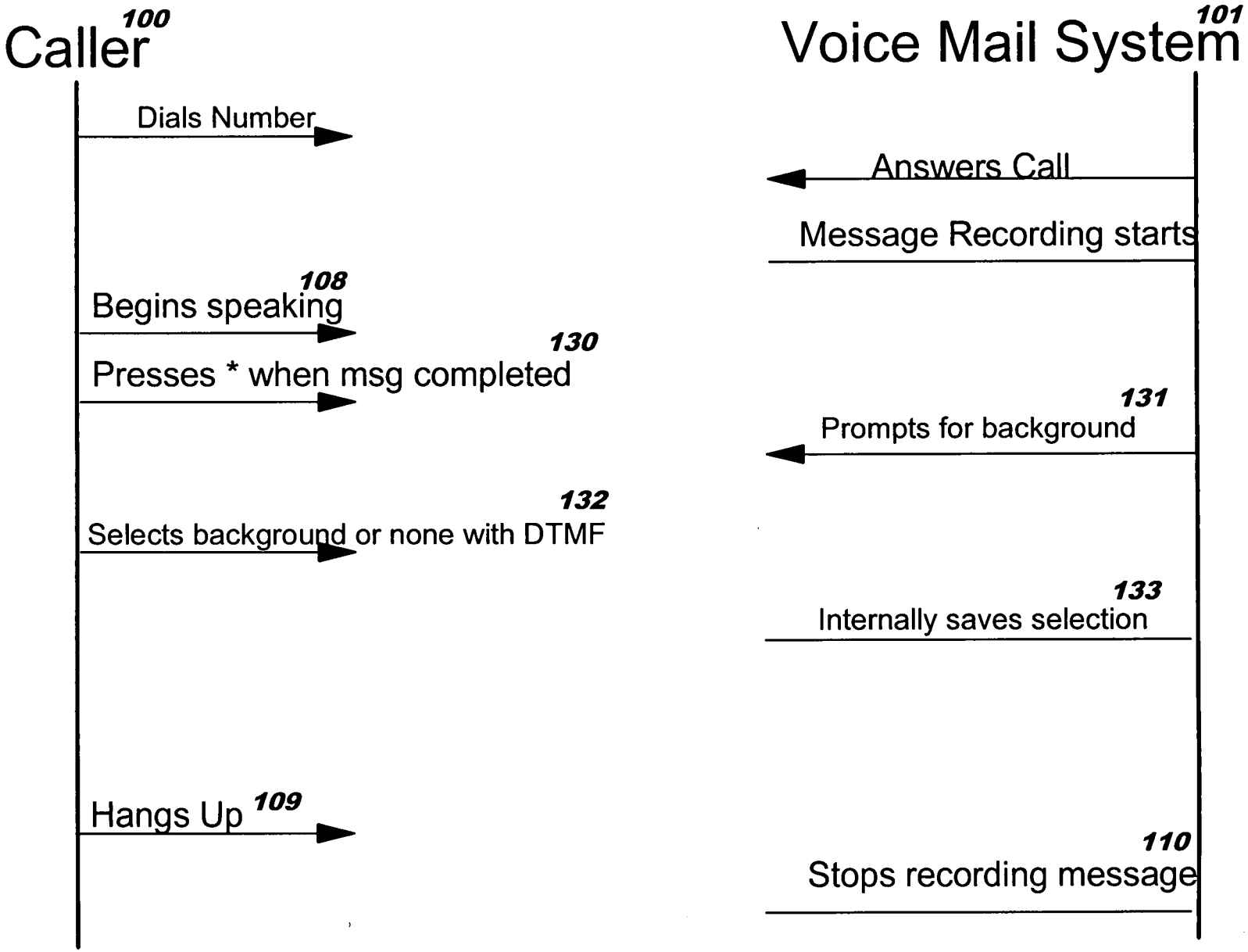
Caller 100
Voice Mail System 101
Dials Number
Answers Call
Message Recording starts
Begins speaking 108
Presses * when msg completed 130
Prompts for background 131
Selects background or none with DTMF 132
Internally saves selection 133
Hangs Up 109
Stops recording message 110

FIG. 1D

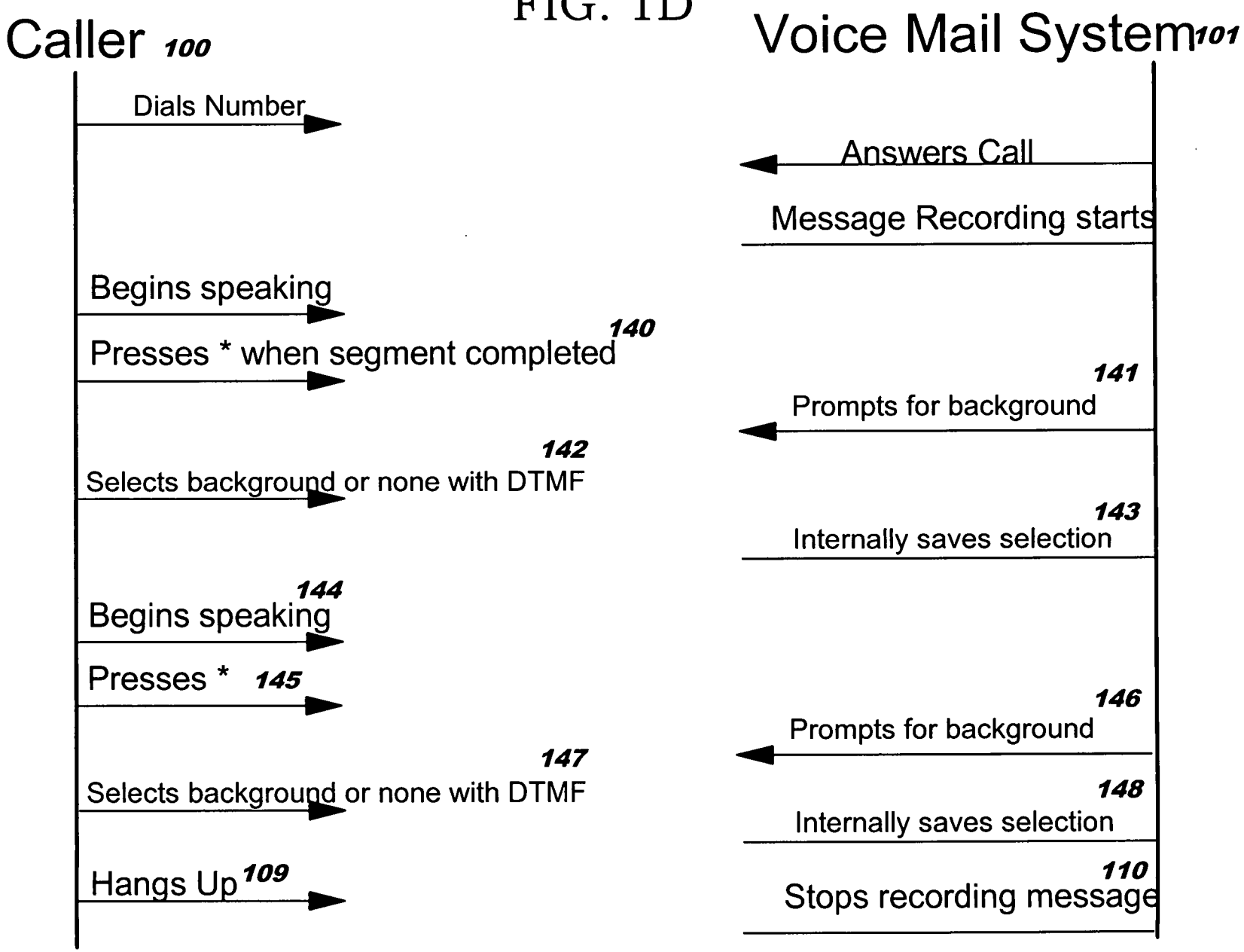
Caller 100
Voice Mail System 101
Dials Number
Answers Call
Message Recording starts
Begins speaking
Presses * when segment completed 140
141
Prompts for background
142
Selects background or none with DTMF
143
Internally saves selection
144
Begins speaking
Presses * 145
146
Prompts for background
147
Selects background or none with DTMF
148
Internally saves selection
Hangs Up 109
110
Stops recording message

FIG. 1E

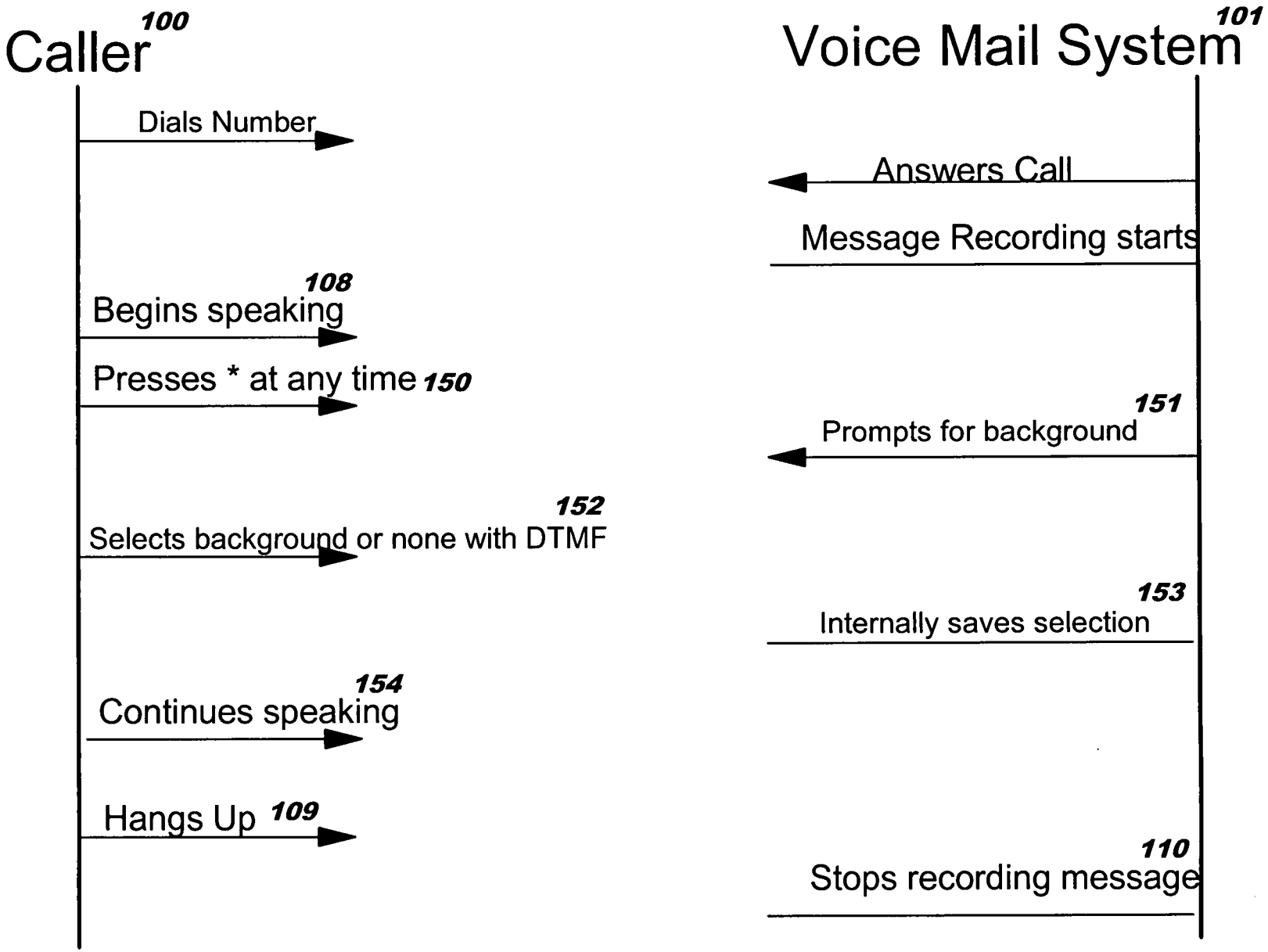
Caller
100
Voice Mail System
101
Dials Number
Answers Call
Message Recording starts
108
Begins speaking
Presses * at any time
150
151
Prompts for background
152
Selects background or none with DTMF
153
Internally saves selection
154
Continues speaking
Hangs Up
109
110
Stops recording message

FIG. 1F

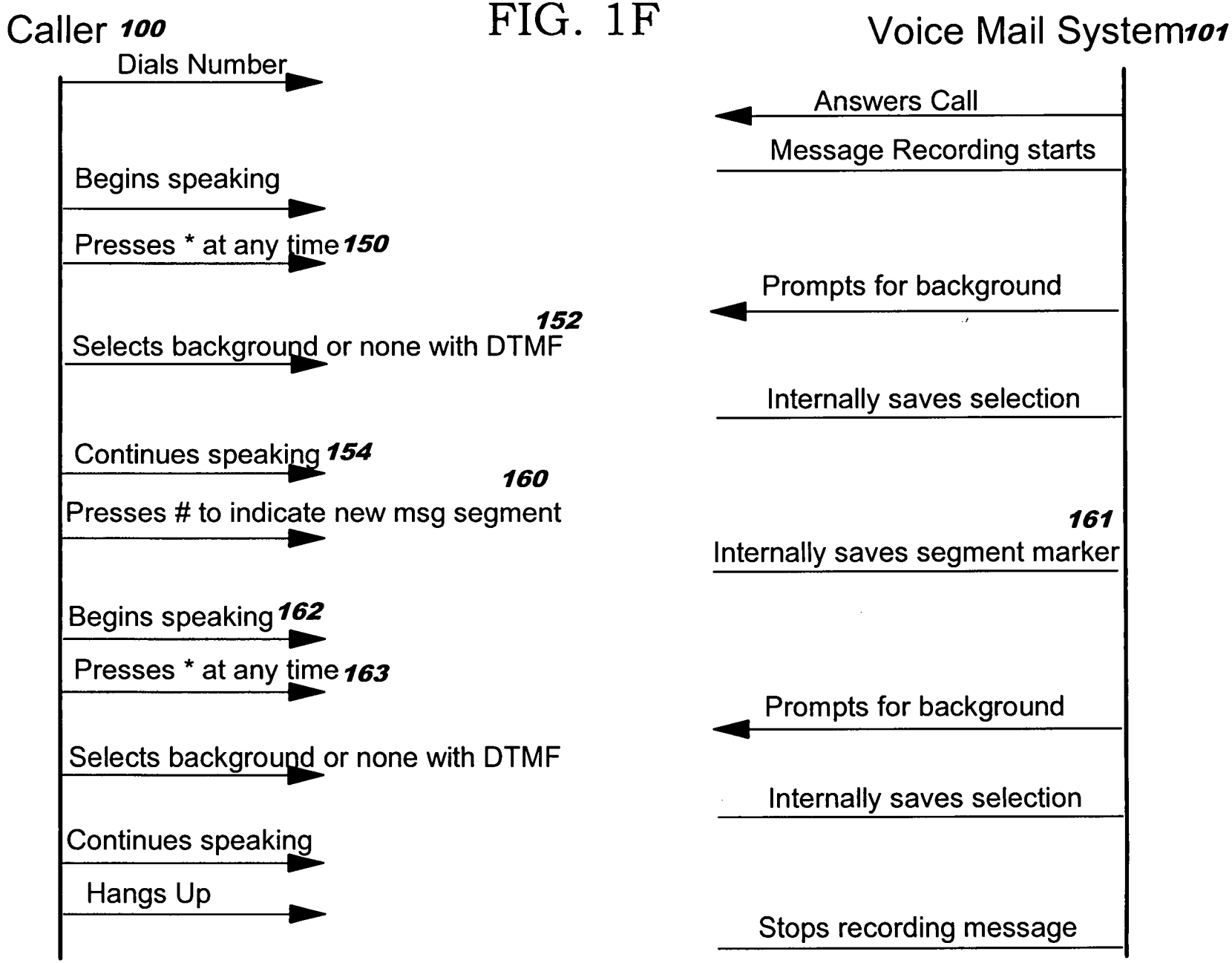
Caller 100
Voice Mail System 101
Dials Number
Answers Call
Message Recording starts
Begins speaking
Presses * at any time 150
Prompts for background
152
Selects background or none with DTMF
Internally saves selection
Continues speaking 154
160
Presses # to indicate new msg segment
161
Internally saves segment marker
Begins speaking 162
Presses * at any time 163
Prompts for background
Selects background or none with DTMF
Internally saves selection
Continues speaking
Hangs Up
Stops recording message

FIG. 2A

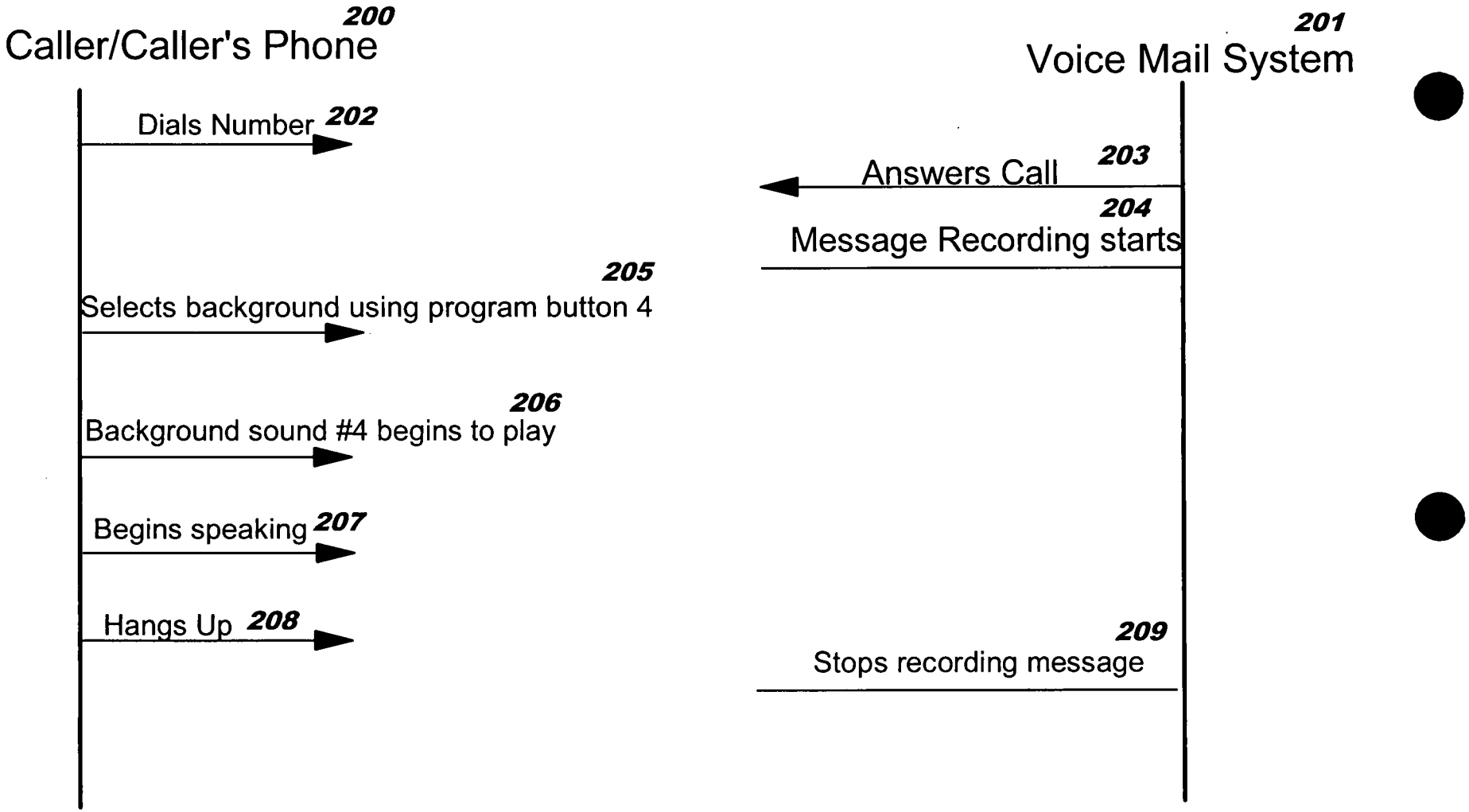
200
Caller/Caller's Phone
201
Voice Mail System
Dials Number 202
Answers Call 203
204
Message Recording starts
205
Selects background using program button 4
206
Background sound #4 begins to play
Begins speaking 207
Hangs Up 208
209
Stops recording message

FIG. 2B

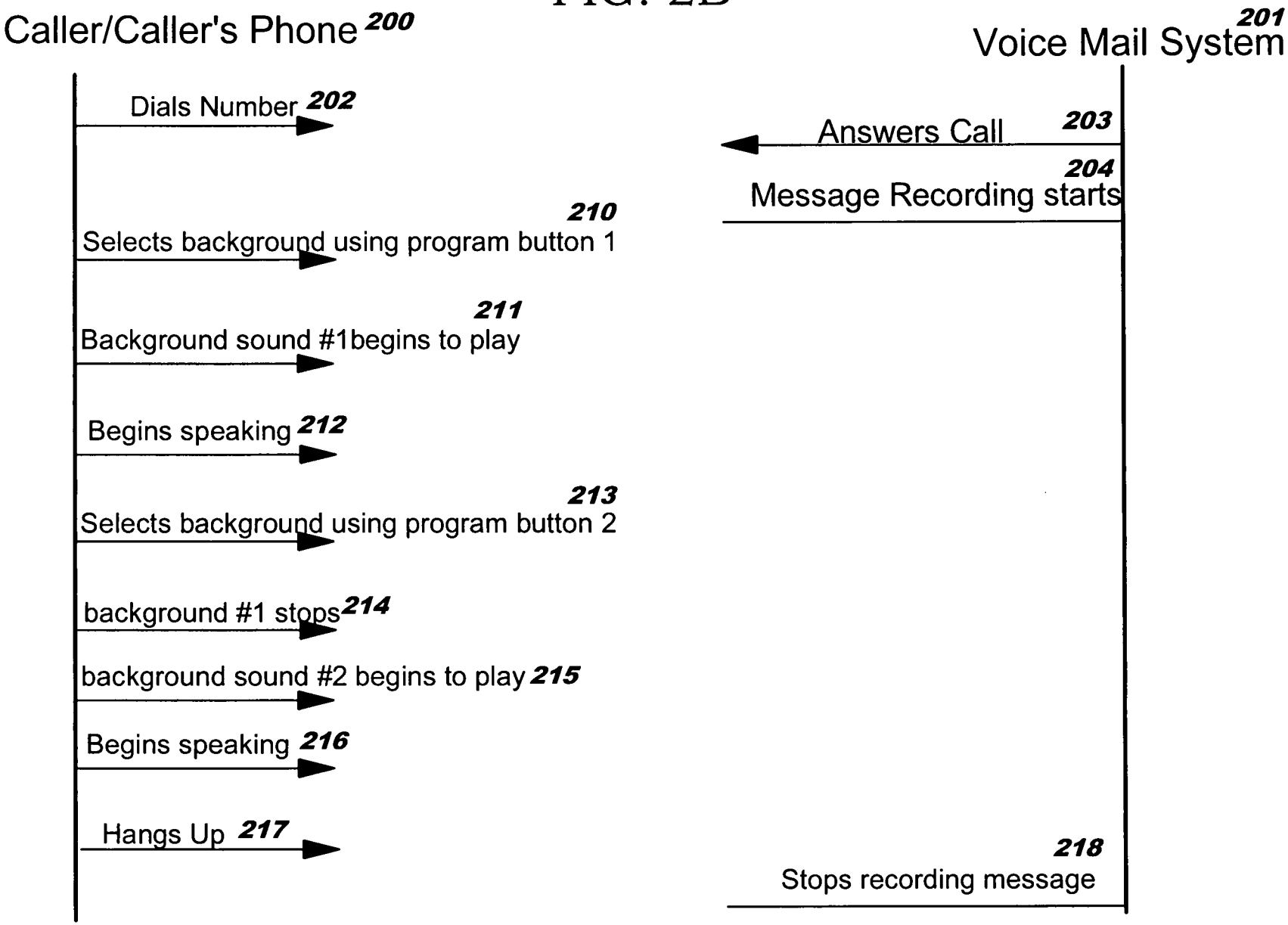
Caller/Caller's Phone 200
Voice Mail System 201
Dials Number 202
Answers Call 203
204
Message Recording starts
210
Selects background using program button 1
211
Background sound #1begins to play
Begins speaking 212
213
Selects background using program button 2
background #1 stops 214
background sound #2 begins to play 215
Begins speaking 216
Hangs Up 217
218
Stops recording message

FIG. 2C

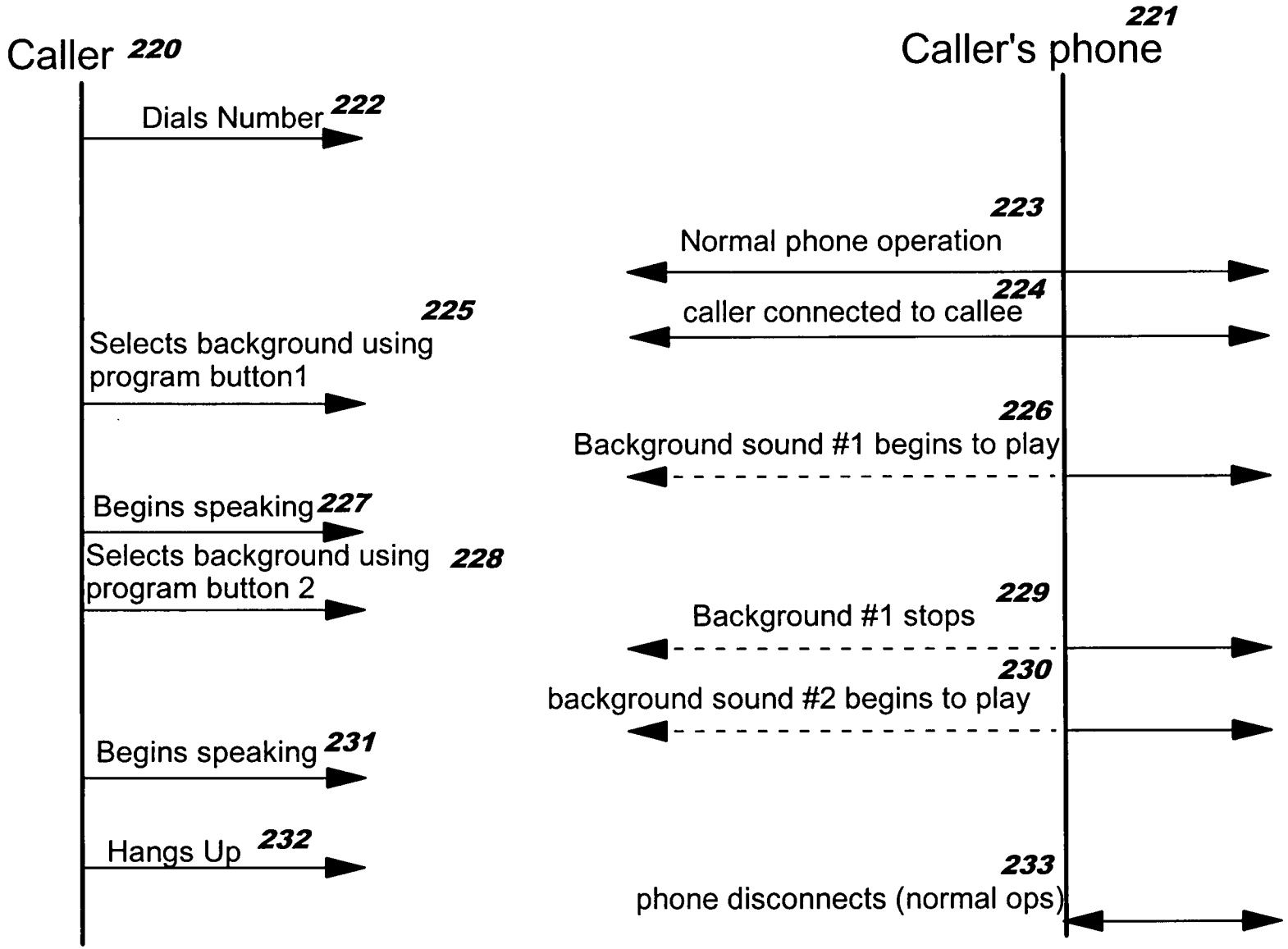
Caller 220
Caller's phone 221
Dials Number 222
223
Normal phone operation
224
caller connected to callee
225
Selects background using program button1
226
Background sound #1 begins to play
Begins speaking 227
Selects background using program button 2 228
229
Background #1 stops
230
background sound #2 begins to play
Begins speaking 231
Hangs Up 232
233
phone disconnects (normal ops)

FIG. 3

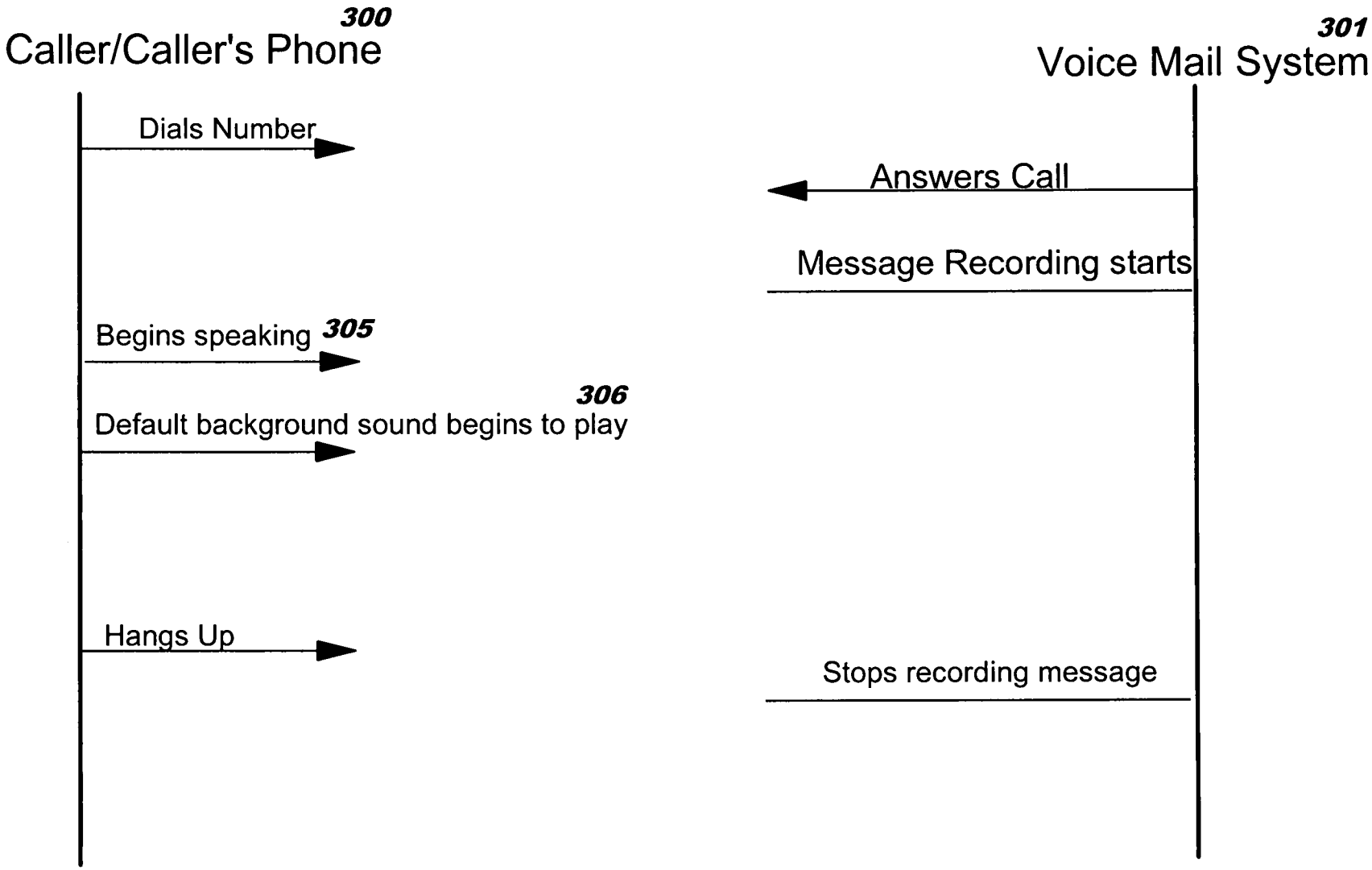
300
Caller/Caller's Phone
301
Voice Mail System
Dials Number
Answers Call
Message Recording starts
Begins speaking
305
306
Default background sound begins to play
Hangs Up
Stops recording message

FIG. 4A

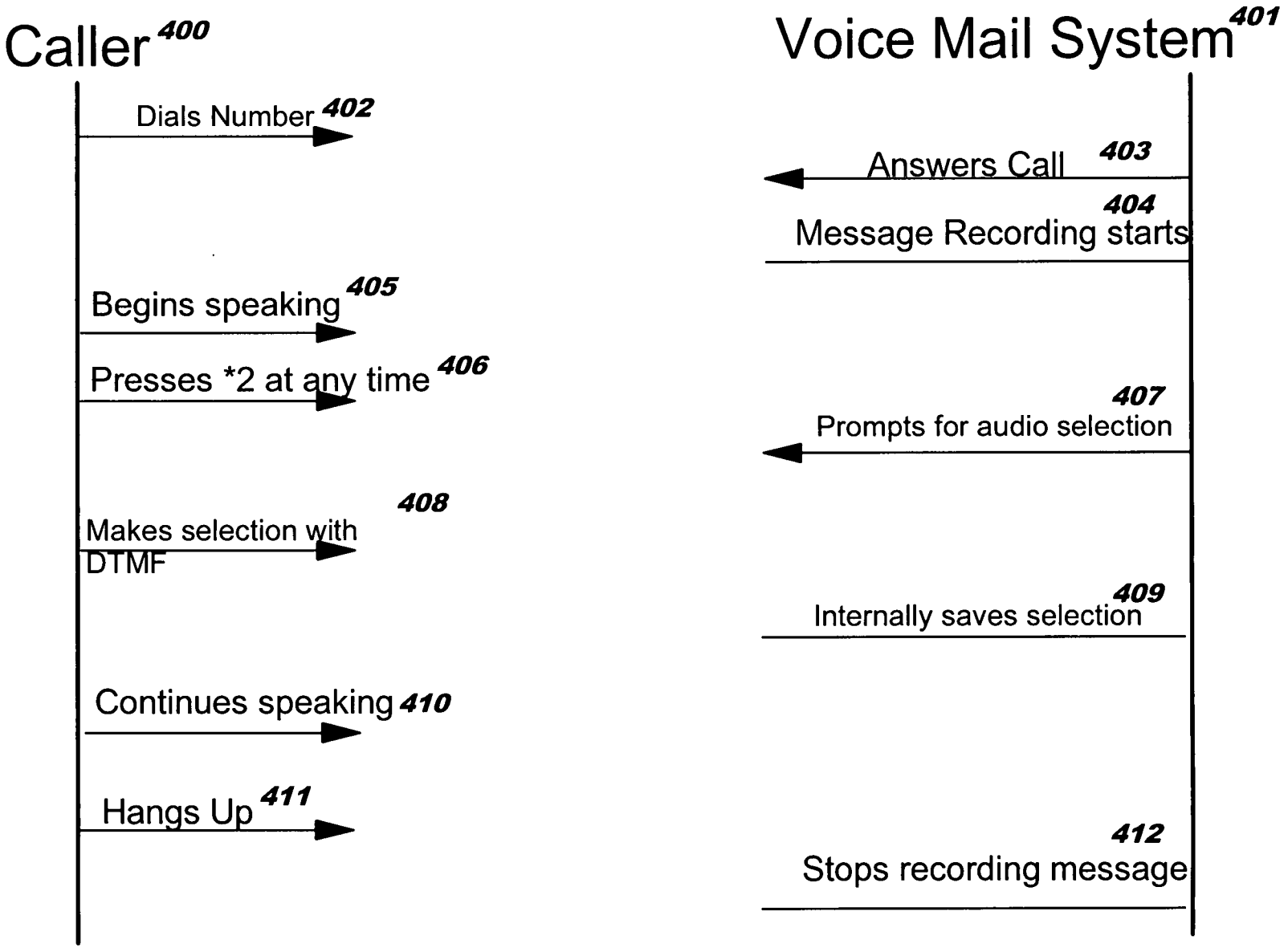
Caller 400
Voice Mail System 401
Dials Number 402
Answers Call 403
Message Recording starts 404
Begins speaking 405
Presses *2 at any time 406
Prompts for audio selection 407
Makes selection with DTMF 408
Internally saves selection 409
Continues speaking 410
Hangs Up 411
Stops recording message 412

FIG. 4B

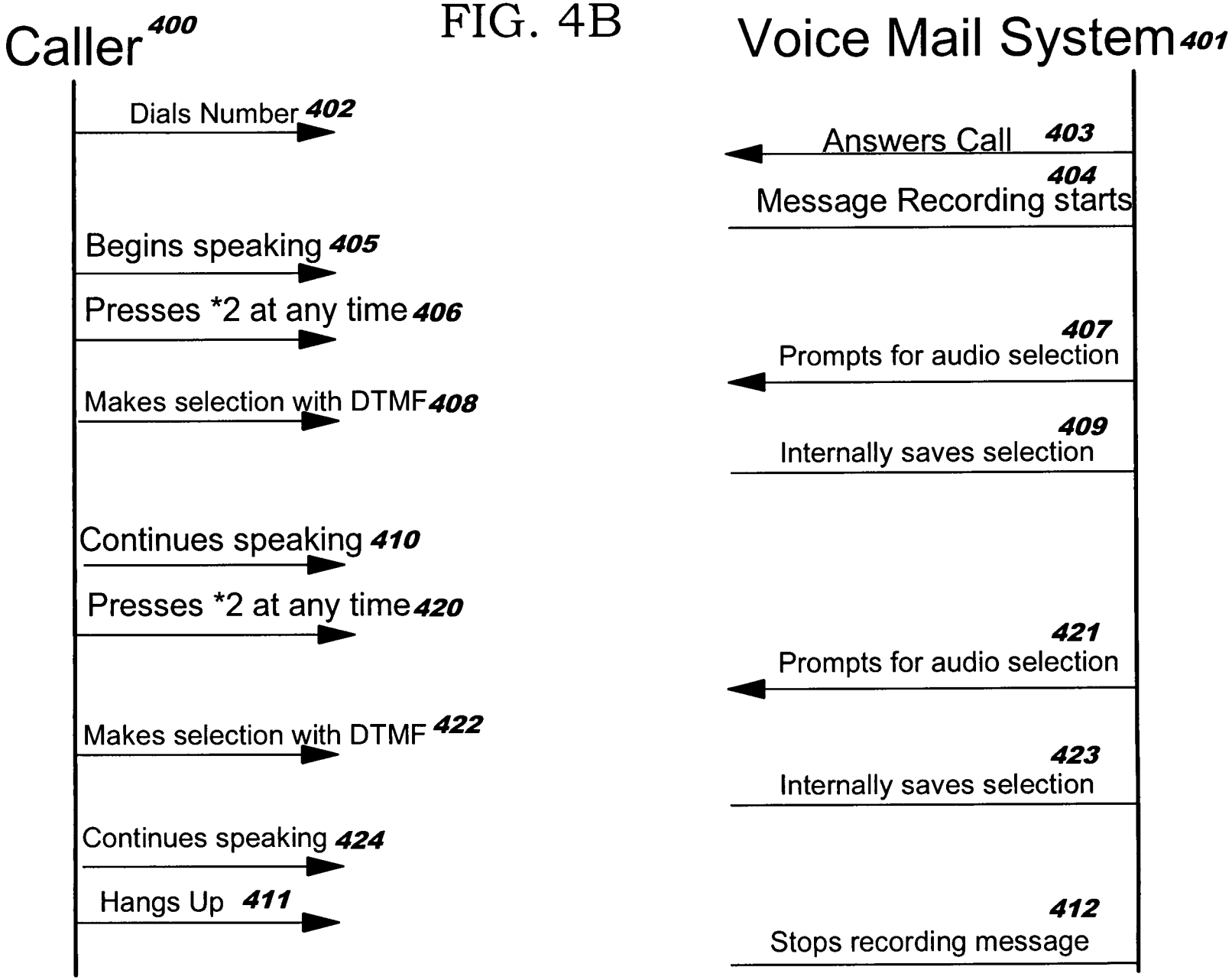
Caller 400
Voice Mail System 401
Dials Number 402
Answers Call 403
404
Message Recording starts
Begins speaking 405
Presses *2 at any time 406
407
Prompts for audio selection
Makes selection with DTMF 408
409
Internally saves selection
Continues speaking 410
Presses *2 at any time 420
421
Prompts for audio selection
Makes selection with DTMF 422
423
Internally saves selection
Continues speaking 424
Hangs Up 411
412
Stops recording message

FIG. 5

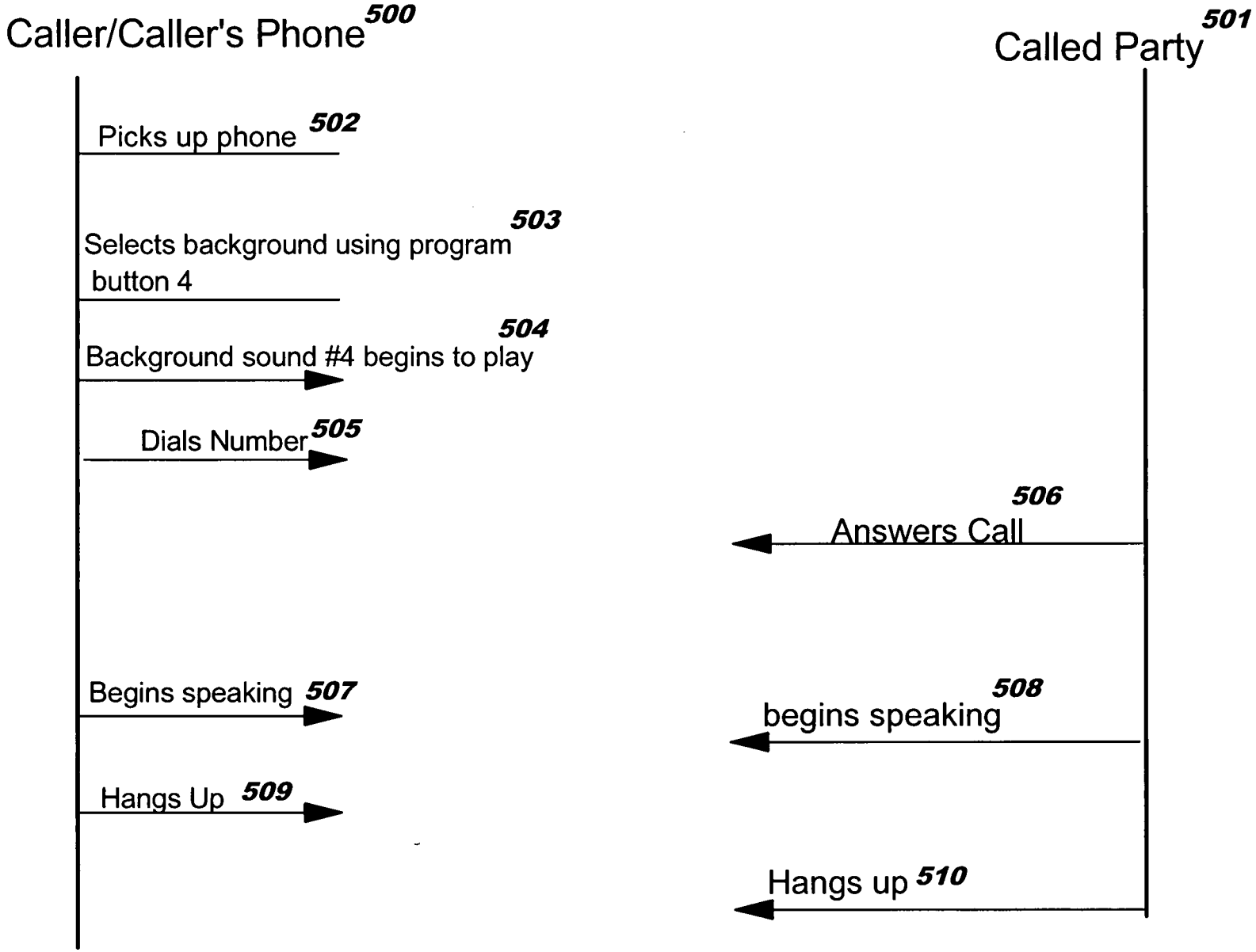
Caller/Caller's Phone 500
Called Party 501
Picks up phone 502
Selects background using program button 4 503
Background sound #4 begins to play 504
Dials Number 505
Answers Call 506
Begins speaking 507
begins speaking 508
Hangs Up 509
Hangs up 510

FIG. 6A

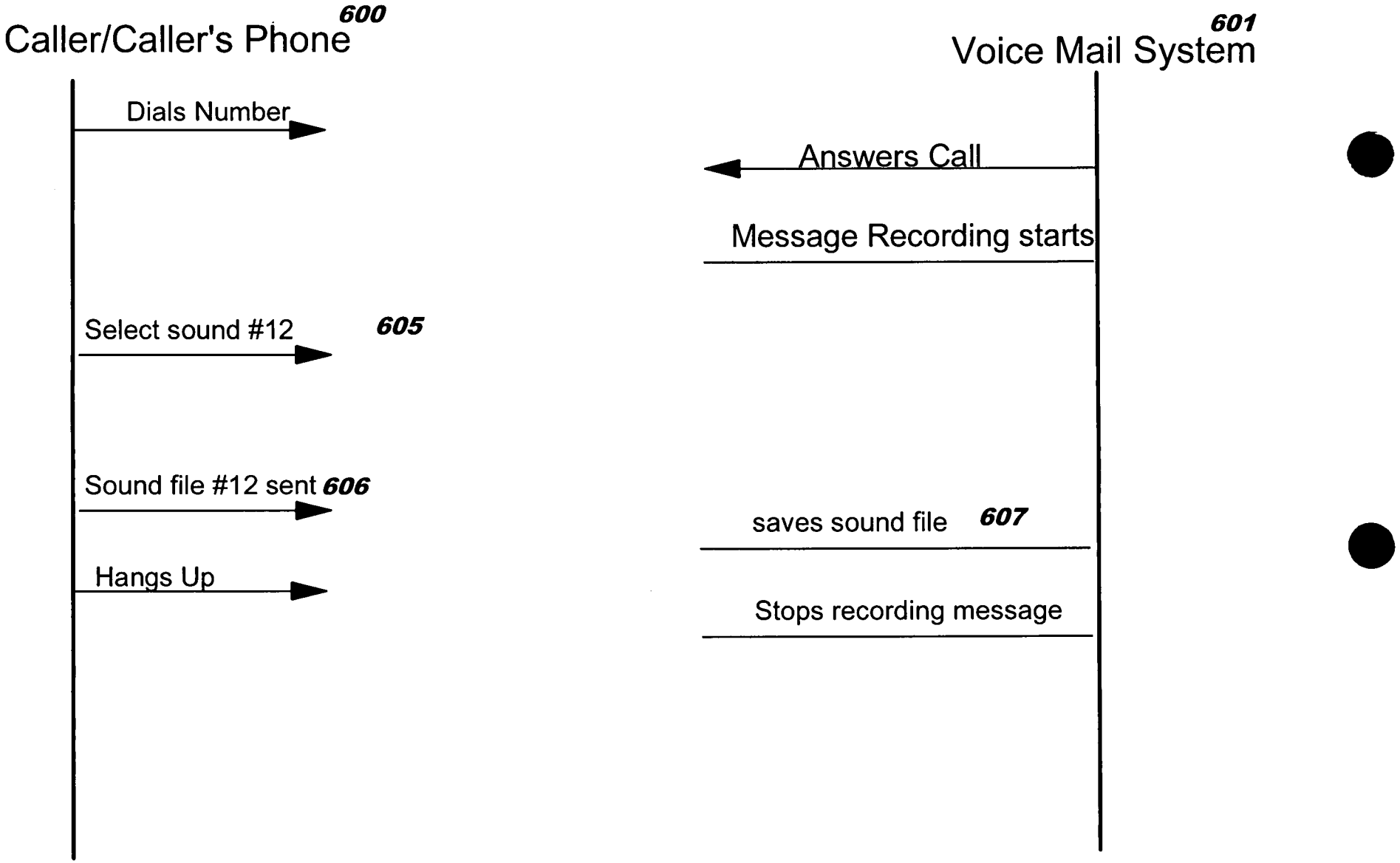
Caller/Caller's Phone
600
Voice Mail System
601
Dials Number
Answers Call
Message Recording starts
Select sound #12
605
Sound file #12 sent
606
saves sound file
607
Hangs Up
Stops recording message

FIG. 6B

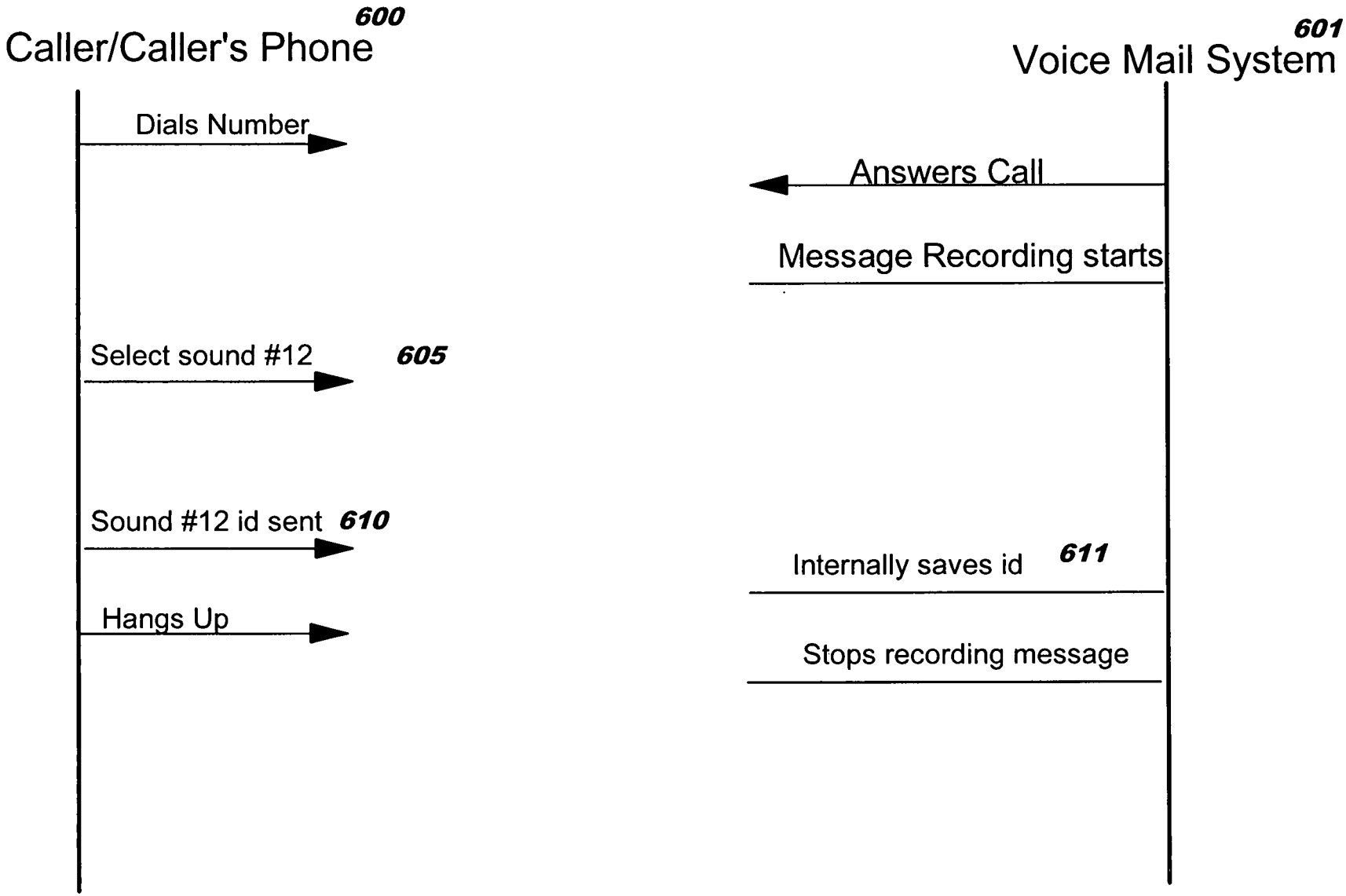
600
Caller/Caller's Phone
601
Voice Mail System
Dials Number
Answers Call
Message Recording starts
Select sound #12
605
Sound #12 id sent
610
Internally saves id
611
Hangs Up
Stops recording message

FIG. 7A

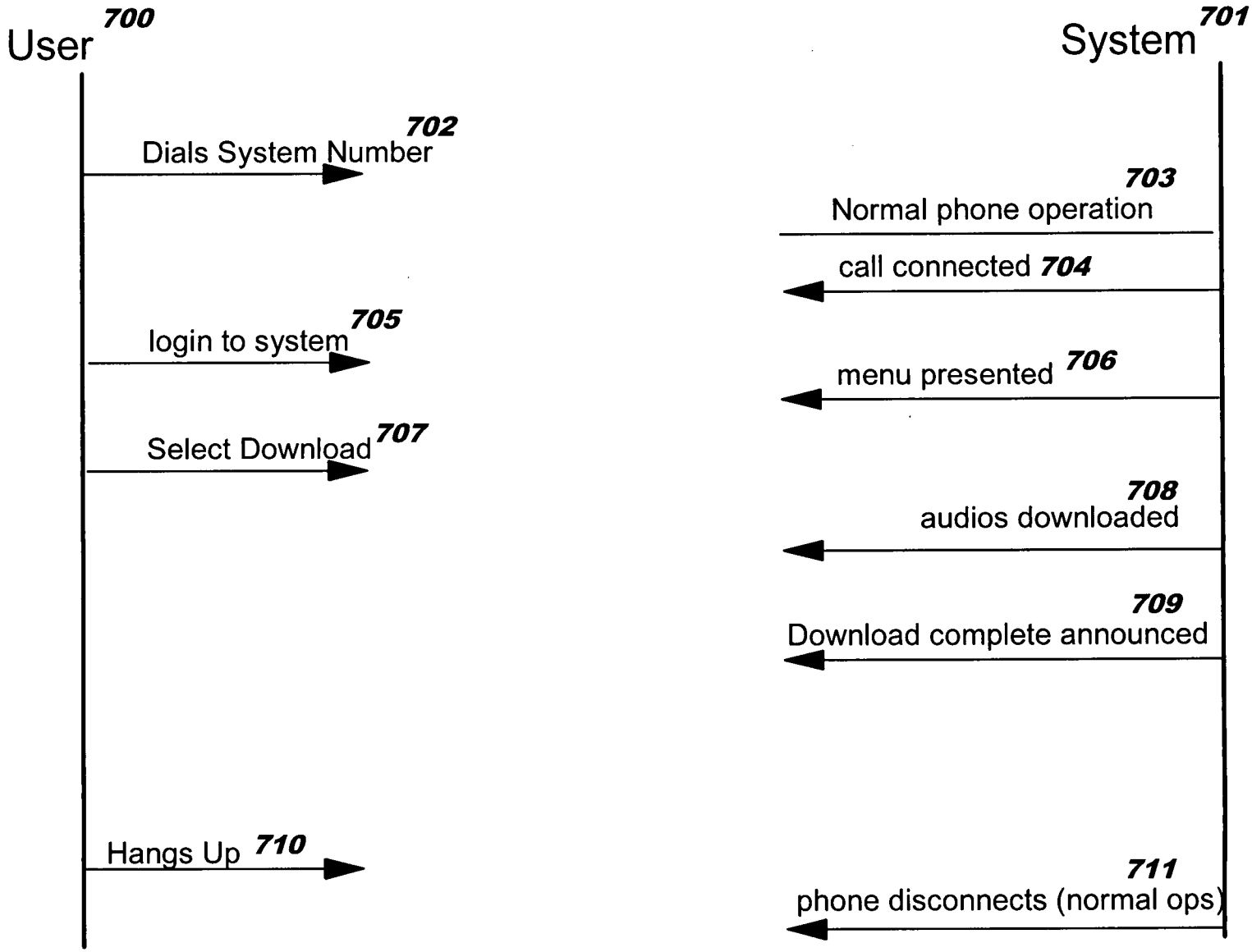
User 700
System 701
Dials System Number 702
703
Normal phone operation
call connected 704
login to system 705
menu presented 706
Select Download 707
708
audios downloaded
709
Download complete announced
Hangs Up 710
711
phone disconnects (normal ops)

FIG. 7B

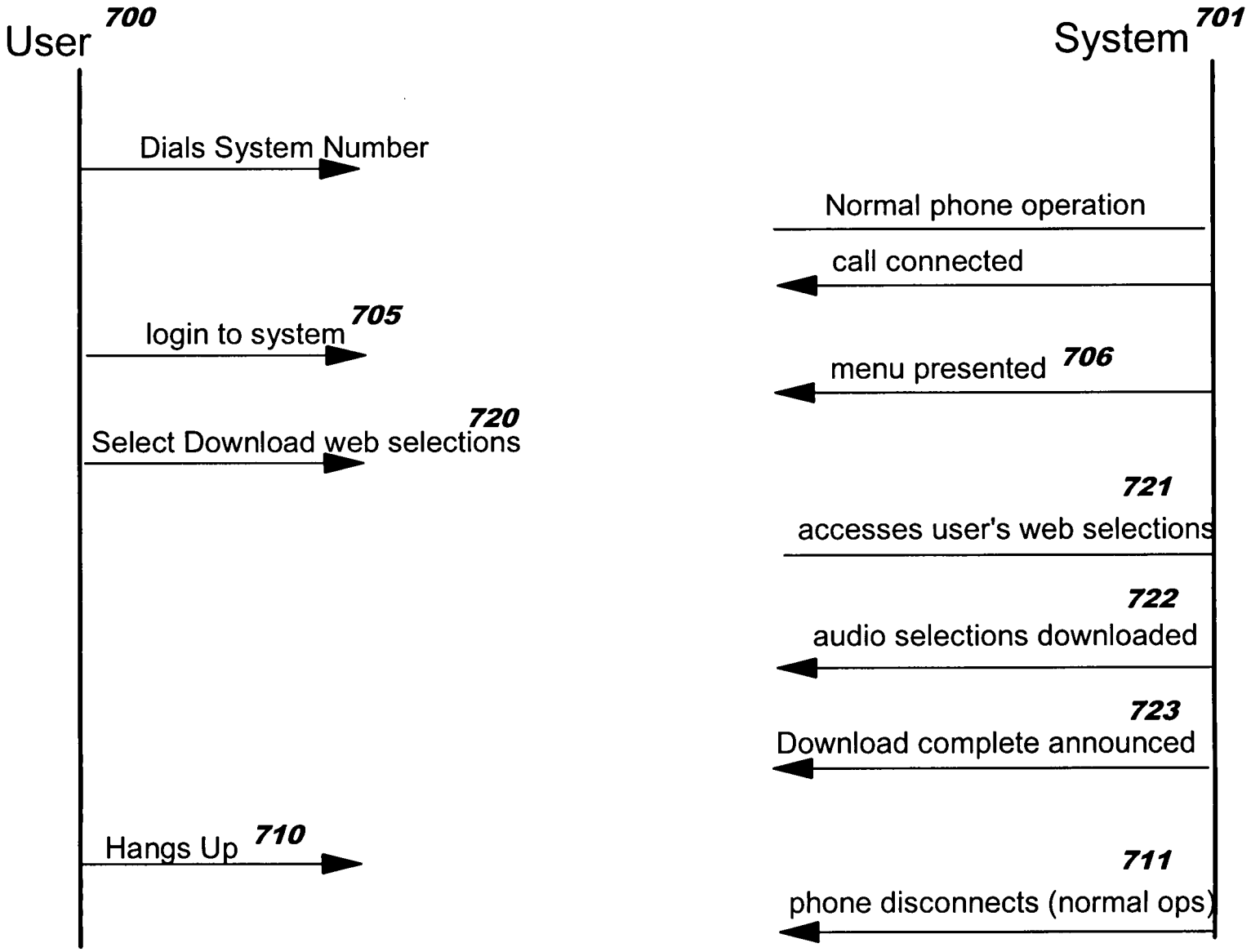
User
700
System
701
Dials System Number
Normal phone operation
call connected
login to system
705
menu presented
706
Select Download web selections
720
721
accesses user's web selections
722
audio selections downloaded
723
Download complete announced
Hangs Up
710
711
phone disconnects (normal ops)

FIG. 8

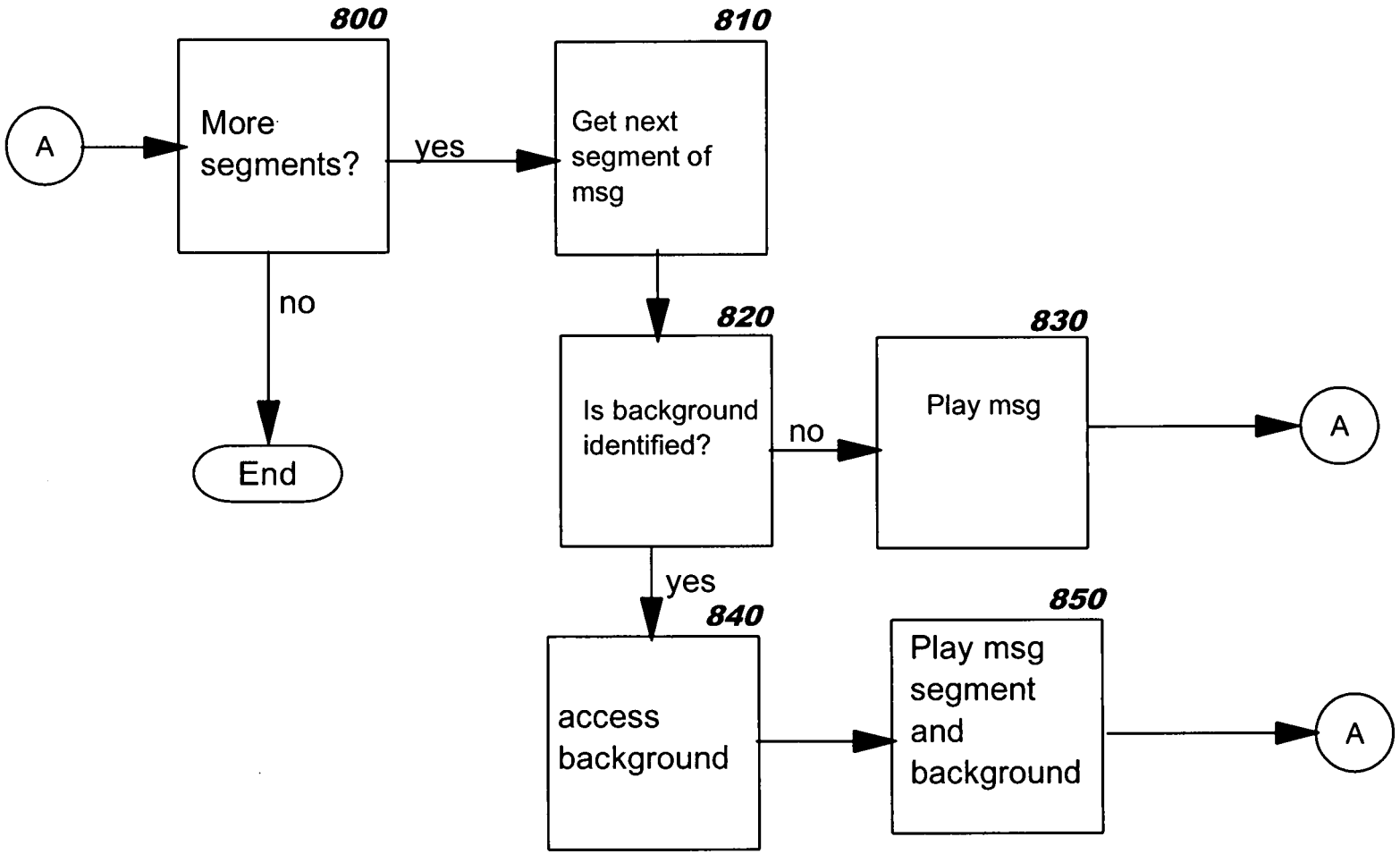
800
810
A
More segments?
yes
Get next segment of msg
no
End
820
830
Is background identified?
no
Play msg
A
yes
840
850
access background
Play msg segment and background
A

FIG. 9A

Message Segment Data Structure *900*

Message segment number
Background selection number
User message

Example code:

910

```
#define MAX_NUM_VOICE_SEGMENTS 500

Struct msg_struct 920
{
    Int segment_number;  /* this field is not necessarily required */
    Int background_selection_number;
    FILE *msg;   /* could be a .wav file */
}

Struct msg_struct voice_msg[MAX_NUM_VOICE_SEGMENTS] 930
```

FIG. 9B

Message Segment Data Structure 940

Message segment number
Selection type
Selection number
User message (only valid if selection type is not an audio file)

Example code:

950
```
#define MAX_NUM_VOICE_SEGMENTS 500
```

960
```
Struct msg_struct
{
    Int segment_number;  /* this field is not necessarily required */
    int selection_type;    /* this is 1 = background,  2 = audio file */
    Int selection_number;
    FILE *msg;   /* could be a .wav file - will be null for audio file */
}
```

970
```
Struct msg_struct voice_msg[MAX_NUM_VOICE_SEGMENTS]
```